

ADT172DI-LED (BI)(V)(L)(T)(K) Strain Gauge Trip Amplifier with Display

- Suitable for SIL 1 & SIL 2 rated (EN 61508-2) Safety Instrumented System (SIS) loop applications, as 1oo1 architecture (HFT:0)
- Non Smart/Non-uProcessor based, Type A instrument
- Supply voltage options: 24Vdc $\pm 10\%$
48Vdc $\pm 10\%$
- RFI Protection to EN 61000-4-3:2006/A2:2010 ('K' option) available
- AMELEC Standard 10 year warranty

Technical Specifications

Input

Typically from any Strain, Load or Pressure sensor, with Minimum Span 4mV. Excitation 10Vdc at up to 30mA as std. (Other voltages available on request)

Outputs

Trip 1 output is a N/O contact as std (N/C may be requested if preferred), Trip 2 has a set of single pole changeover contacts, rated at 250VAC, 3A, 100VA resistive. (Latching relay options also available, 'L' option)
Red LED indication of each Relay status, ON Energised as standard (Red/Green 'BI'-colour LED status indicators optional)
Fail Safe Relays De-energise on Trip & on Loss of Power as standard
Display of the Input range on a 4 or 4½ digit Front LED Display,
Calibration Range: -9999 to +19999, factory scaled as either **0.0 – 100.0 (%)** or in any other 'Engineering units' if preferred to suit the application

Front fascia Toggle switch shows the trip set points within the calibrated scale on the display.

Isolation

1000V RMS* Input/Excitation/Contact/Contacts/Supply/Earth
*(500Vdc when 'K' option is specified)

Performance

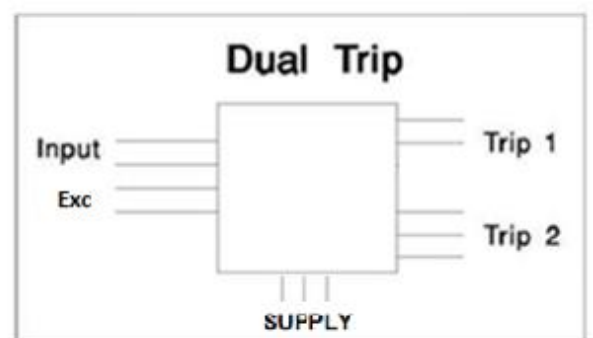
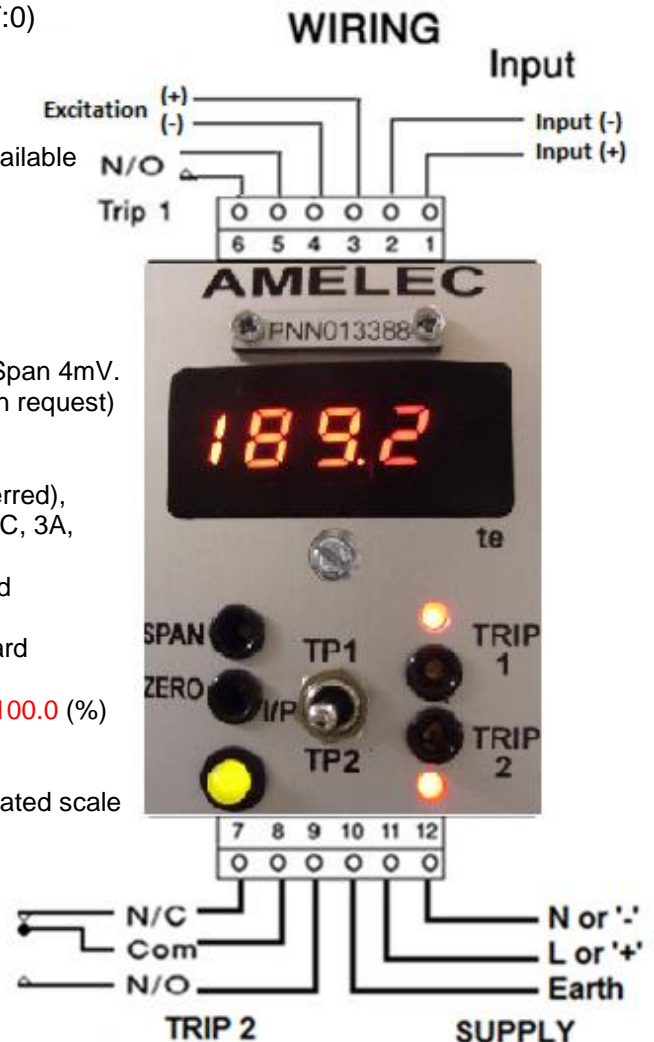
Deadband: Fixed 1% std (Variable 1-20% span 'V' option available)
Trip settability: $\pm 0.1\%$ span
Trip repeatability: $\pm 0.1\%$ span
Response time: <100mS (0-100% input step change)
(Fixed or Adjustable Time Delay into Trip: 'T' option available)
Input O/C response: Upscale drive as standard
(O/C response Downscale drive may be specified if preferred)
'K' option RF Immunity: 20MHz-3GHz/5.25GHz $\leq 10\text{V/m}$,
80MHz-1GHz/5.6GHz $\leq 30\text{V/m}$, 889MHz/1.75GHz $\leq 40\text{V/m}$.

Environmental Conditions

Storage Temperature: -40 to +70°C
Operating Ambient: -15 to +55°C
Relative Humidity: 5 – 95% RH (Non-Condensing)
EMC: 2014/30/EU, EN 61326-1:2013 (Controlled EM)
(‘K’ option: to the highest Generic Industrial levels)

Customer Termination

Fixed screw terminals as standard
(Plug-in terminals optional)



Mounting/Dimensions

'DI' Enclosure Dims: 50w x 75h x 145d mm
(RFI 'K' option enclosure: 50w x 75h x 182d mm)
Din Rail (TS35) mounting as Standard.
Seismic/Surface Keyhole plate (50w x 130h mm) &
Front of Panel options also available on request.
(Bezel Dims: 57w x 96h, Cut out Dims: 51w x 76h mm)